



BioEngine® Fingerprint SDK

Join Our Commitment to Superior Technology

BioEngine® Software Facts:

- Over 100 million templates issued worldwide
- National Institute of Standards and Technology's (NIST) Minutiae Interoperability Exchange Test (MINEX) certified
- General Services Administration's (GSA) FIPS 201 Approved Product
- Top-tier performance in NIST's Fingerprint SDK tests
- Provided as an easy-to-integrate software module
- Interfaces with BioTouch® and DFR® single fingerprint readers and other approved third party devices

Incorporate superior fingerprint verification technology into your custom applications with the BioEngine® Software Development Kit (SDK). Our highly accurate and robust fingerprint technology, combined with our 20+ years experience and unmatched professional services team will give you confidence that your implementation will not only be successful, but hassle-free.

SUPERIOR TECHNOLOGY

Tests conducted by the United States Federal Government (NIST) ranked BioEngine® software in the top tier. BioEngine software is highly accurate fingerprint technology based on a proven minutiae matching algorithm. Millions of people around the world every day use systems enabled by our technology to access their bank records, receive pension benefits, secure patient records, and protect against identity and voter fraud.

EASY-TO-INTEGRATE COMPONENTS

BioEngine® technology is packaged into an easy to use SDK that enables software developers and system integrators to integrate fingerprint matching technologies with most Microsoft Windows-based applications. The BioEngine SDK is designed for one-to-one (authentication) applications, which compare two minutiae templates and return a score. You set the system threshold to define the match acceptance level. The included Standards Formatting SDK makes it easy to construct and interpret the standard interchange formats with the associated CBEFF headers.

COMMITMENT TO SERVICE

We deliver more than just superior technology. System integrators and developers are supported by our help desk and our professional services group, which provides a full range of offerings that include exceptional RFI and RFP assistance, integration and implementation support, and custom solutions design.

Standard Formatting SDK includes capability to format face, finger, and iris Biometric Data Blocks (BDBs) and place them in CBEFF data structures.

Also included in the BioEngine SDK are sample applications in Microsoft Visual C++. These samples provide code to capture a fingerprint from a reader, display the fingerprint, extract minutiae, evaluate the print quality, and perform one-to-one matching.

The BioEngine SDK works with our single fingerprint readers and supported third party fingerprint readers, and is compatible with Microsoft Visual C++ and Microsoft Visual Basic development systems.



BioEngine® SDK Modules

- Quality Control Module helps to ensure the captured images are high quality and that the finger is correctly placed on the reader and provides NIST Fingerprint Image Quality (NFIQ) score.
- Template Creation Module extracts minutiae information from a fingerprint image and produces an accurate and compact fingerprint template. Supports the following template formats:
 - BioEngine 3 and BioEngine 6 Templates
 - ISO/IEC 19794-2:2005
 - Finger Minutiae Record Format
 - Finger Minutiae Card Format Normal and Compact
 - ANSI/INCITS 378-2004
- Verification Module provides top tier accuracy in the matching of templates.
- Media Processing Module provides disk and memory input-output operations for images for the following formats: FBI Certified WSQ, JPEG, JPEG2000, BMP, and TIFF.

Specifications

Technical Specifications	
Platforms Supported	Windows 2000/XP/2003
Input	Works with any fingerprint images 250 pixels per inch or higher. Recommended 500 pixels per inch or higher.
Speed	Template creation in less than one second and matching less than 50 milliseconds
Template Size	Variable depending on the format
Included in the Package	
BioEngine® Modules	
Standards Formatting SDK	
Sample Applications	
Developer's Guide	Electronic copy
System Requirements	
Microsoft Windows NT, Windows 2000, or Windows XP operating system	
Develop with Microsoft Visual C++ 6.0 or above or Microsoft Visual Basic 5.0	
500 MHz Pentium PC (or higher)	
125 MB available hard disk space	
CD-ROM drive	

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Deployments:

- Voter registration programs in Costa Rica, Panama, and Dominican Republic
- Driver license programs in the U.S., India, and El Salvador
- Secure banking applications in Brazil, Colombia, U.K., and Indonesia
- Healthcare organizations across the United States
- ID Card programs with the U.S. Department of Defense

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